



**UNITED STATES OF AMERICA  
BEFORE THE  
DEPARTMENT OF ENERGY, OFFICE OF ELECTRICITY DELIVERY AND  
ENERGY RELIABILITY**

**International Transmission Company**  
**d/b/a ITC Transmission**

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*230-4*  
**Docket No. PP-~~203-3~~**

**COMMENTS OF  
THE INDEPENDENT ELECTRICITY SYSTEM OPERATOR**

**I. INTRODUCTION**

The Independent Electricity System Operator of Ontario (“IESO”)<sup>1</sup> respectfully submits these comments in the above-captioned proceeding. International Transmission Company d/b/a ITC Transmission (“ITC”) is requesting that the Department of Energy (“DOE” or the “Department”) amend the above-referenced Presidential Permit held by ITC to authorize modifications to facilities interconnecting ITC with Hydro One Networks Inc. (“Hydro One”) on the United States-Canada border (“the Interconnection Facilities”).

**II. BACKGROUND**

Presidential Permit PP-230-3 authorizes ITC to operate and maintain the Interconnection Facilities including one 230 kV transmission line and one 675 MVA phase angle regulator (“PAR”) connecting ITC’s Bunce Creek Station located in

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<sup>1</sup> The IESO is a not-for-profit corporation without share capital having statutory responsibility for developing and administering the wholesale electricity markets and directing the operation and maintaining the reliability of the integrated power system within the province of Ontario. The Ontario electric transmission system operated by the IESO is interconnected with the United States electric transmission system at multiple locations along the U.S. – Canadian border. The IESO was established on April 1, 1999 as the Independent Electricity Market Operator under the Electricity Act, 1998 (Ontario) and was continued under its current name on January 1, 2005. The IESO is subject to oversight by the Ontario Energy Board (“OEB” or the “Board”).

Maryville, Michigan with Hydro One's Scott Transformer Station ("Scott TS") located in Sarnia, Ontario. In March 2003, the PAR failed while in service. Through its filing before the DOE on January 5, 2009, ITC is now requesting authorization to replace the failed PAR with two 700 MVA PARs connected in series ("new PARs").

### III. COMMENTS

The IESO is generally supportive<sup>2</sup> of ITC's request to modify its Presidential Permit as set out in its application. On review of the technical information contained in the filing submitted by ITC before the DOE, the IESO understands that the new PARs and the increased shifting capability offered by them would have no negative impact on the operation of the interconnection facilities.

Although the increase in phase shifting capability will not eliminate unscheduled loop flows, the IESO believes that the installation of the new PARs is essential to reduce such unscheduled flows. Unscheduled loop flows are problematic for the following reasons:

- Unscheduled loop flows increase congestion on the interconnected facilities which affects system reliability;
- The use of Transmission Loading Relief procedures ("TLRs") to manage congestion caused by unscheduled flows results in deviations from economic dispatch solutions thereby impacting market efficiencies; and

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<sup>2</sup> IESO support of ITC's filing before the DOE is **conditioned** on ITC addressing concerns raised by the IESO in Section IV.

- Unscheduled loop flows contribute to Financial Transmission Rights (“FTR”) revenue deficiencies as they take up space on flowgates. Reduced FTR revenues can often be a disincentive for transmission build or transmission upgrade investments.

Lake Erie loop flows<sup>3</sup> are highly volatile in nature and, according to the joint study conducted by the Midwest ISO (“MISO”) and PJM Interconnection LLC (“PJM”),<sup>4</sup> can swing over 1,000 MWs in a couple of hours. The study also noted that for the study period, the flows ranged between 1,500 MW in the counter-clockwise direction to 500 MW in the clockwise direction with a median circulation of about 640 MW in the counter-clockwise direction (i.e., PJM-NYISO-IESO-MISO). Lake Erie Circulation is an issue that has existed for many years, affecting all organizations in the northeast region of the Eastern Interconnection, and as such the IESO recommends that the new PARs be placed in service as soon as possible.

#### **IV. CONDITIONS FOR IESO SUPPORT/CONCERNS**

The IESO is supportive of ITC’s filing provided that ITC turns over the operational control of the PARs to its NERC-registered Reliability Coordinator (“RC”), MISO. It is imperative that the operational control of the PARs be with MISO and be able to make use of the regulating capability of the PARs as soon thereafter as possible to ensure that the operation of the new PARs meet the appropriate NERC reliability standards. This transfer of operations would also be consistent with an observation made

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<sup>3</sup> Lake Erie loop flow is defined as the difference between actual flow and schedule flow on the interfaces of the four markets around Lake Erie (MISO, IESO, NYISO, and PJM).

<sup>4</sup> **Investigation of Loop Flows Across Combined Midwest ISO and PJM Footprint**, released on May 25, 2007

by the Federal Energy Regulatory Commission (“FERC” or the “Commission”) in its February 20, 2003 order<sup>5</sup> which stated that:

In addition, Applicants assert that they will use their best efforts to facilitate the transfer to the Midwest ISO of International Transmission's operational responsibility and control of the phase angle regulators (PARs) that comprise part of the facilities owned by International Transmission at the Michigan-Ontario, Canada international border.

From the above statement, it is evident that the transfer of ITC's operational responsibility and control of the new PARs to MISO was a factor in FERC approving the divestiture.

Additionally, operating instructions need to be finalized between MISO and the IESO in order to regulate loop flows on the Michigan-Ontario interface. MISO has indicated to the IESO their unwillingness to finalize these operating procedures without consent from ITC. Given the role and importance of the new PARs in reducing unscheduled loop flows across the Michigan/Ontario interface, the IESO encourages ITC to support MISO signing the MISO/IESO operating instructions with the IESO. These operating instructions have taken into account all relevant comments and changes suggested by ITC.

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<sup>5</sup> The FERC order issued on February 20, 2003 under Docket Numbers EC03-40-000 and ER03-343-000: “*Order authorizing disposition of jurisdictional facilities, accepting for filing proposed agreements, requiring compliance filing, and accepting in part and rejecting in part proposed transmission rates*” approved the disposition of International Transmission's jurisdictional facilities to ITC Holdings through the sale of International Transmission's stock to ITC Holdings. The divestiture of jurisdictional assets by Detroit Edison, DTE Energy Company, and International Transmission to ITC Holdings was required as a condition for ITC to join MISO as an independent transmission company and for sharing certain RTO functions with MISO. The jurisdictional assets involved included all physical transmission facilities owned by International Transmission, as well as all contracts, related books of account, and records.

## V. CONCLUSION

The IESO is generally supportive of ITC's request for the amendment of its Presidential Permit given the importance of PARs in reducing unscheduled loop flows. However, the IESO believes that these PARs can be effectively utilized only if operational control of these PARs is given to MISO and operating instructions between the IESO and MISO are finalized. Hence, the IESO requests that DOE condition its approvals based on the concerns and issues expressed by the IESO in Section IV above.

Respectfully submitted,



/s/ Nicholas Ingman

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March 11, 2009